Proactive and Adaptive Decision Support Study (PDS)

Status Report #3

Date of Report: 31 October 2014

For the Reporting Period: 1 Oct 2014 – 31 Oct 2014

Contract Number: N00014-14-P-1187

CDRL: B001 **CLIN:** 0004

Report Prepared For:

Jeffrey Morrison, Code: 341 875 N. Randolph St. Arlington, VA 22203-1995

703-696-2875

jeffrey.g.morrison@navy.mil

Report Prepared By:

Thomas G. Allen
Boston Fusion Corp.

1 Van de Graaff Drive, Suite 107
Burlington, MA 01803-5176
617-583-5730 x109
tom.allen@bostonfusion.com

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send commentarters Services, Directorate for Inf	ts regarding this burden estimate formation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	his collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 31 OCT 2014		2. REPORT TYPE		3. DATES COVE 01-10-2014	RED 4 to 31-10-2014	
4. TITLE AND SUBTITLE				5a. CONTRACT	NUMBER	
Proactive and Ada	ptive Decision Supp	ort Study (PDS)		5b. GRANT NUM	MBER	
				5c. PROGRAM I	ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
	ZATION NAME(S) AND AE p.,,1 Van de Graaff (A,01803	` '		8. PERFORMING REPORT NUMB	G ORGANIZATION ER	
9. SPONSORING/MONITO	RING AGENCY NAME(S) A	AND ADDRESS(ES)		10. SPONSOR/M	IONITOR'S ACRONYM(S)	
				11. SPONSOR/M NUMBER(S)	IONITOR'S REPORT	
12. DISTRIBUTION/AVAII Approved for publ	LABILITY STATEMENT ic release; distributi	ion unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC	ATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	6	REST ONSIBEE I ERSON	

Report Documentation Page

Form Approved OMB No. 0704-0188



Summary

During October, the principal activities for Boston Fusion were related to planning for the PADS Workshop. Summaries of these activities appear in the subsequent section.

Progress During Reporting Month

During the month of October, Boston Fusion conducted the following activities for PDS:

- Continued development of a narrative describing the potential benefits of the *Info-Cognitive Proactive Decision Support* (*InfoCog*) technology.
- Continued development of a notional technology roadmap that describes the required technology necessary for *InfoCog* to become viable.
- Continued development of a technology space characterization to identify the needs and requirements for decision support technology for PADS, and describe how PDS technologies cover subsets of that space, in preparation for defining workshop objectives.
- Continued coordination and exchanges with Pacific Science and Engineering (PS&E) regarding workshop preparation ideas.
- Prepared for in-depth meeting with PS&E, which included initiation of a literature survey to
 identify relevant technology areas and advances for the cognitive science (PS&E) and
 mathematical (Boston Fusion) frameworks that are used to approach decision making support.
 Pre-meeting activities included:
 - o Preliminary investigation into relevant research in quantitative analysis;
 - Identification of key researchers in quantitative analysis to recommend for workshop participation;
 - o Generation of presentation and discussion topics; and
 - Development of initial agenda, workshop structure, participant engagement strategies.
- Hosted a meeting on 28-29 October with Pacific Science and Engineering (PS&E) to initiate
 timeline development and plans for PADS workshop, and to identify areas in which discussions
 with the customer would be especially helpful in setting the workshop agenda and participant
 list.
- Met with Dr. Jeff Morrison (ONR) on 29 October to discuss workshop vision, objectives, and desired outputs as part of the workshop development process. Based on this meeting, our team has a clearer understanding of the scope and long-term vision for this initiative, which will (1) focus on the science of context-based decision making, and (2) identify multiple valuable, related research recommendations for programs and SBIR topics. Based on this meeting, we established the following timeline for subsequent activities:



Milestone	Date
Identify workshop format → 2-day standalone format	29 Oct 2014
Identify key participants (panelists, key note)	15 Nov 2014
Identify and secure dates/spaces → in DC area	30 Nov 2014
Identify additional participants	30 Dec 2014
Draft invitations for review	30 Dec 2014
Send Invitations	
Develop use cases	15 Jan 2015
Introduce concepts to panelists / breakout facilitators (purpose, use cases, Mastermind group)	30-45 days prior to workshop
Develop workshop materials (briefings, outbrief templates)	15-30 days prior to workshop
Workshop	Mar / April 2015

Plans for Next Month

During the month of November, we plan to do the following activities for PDS:

- Complete development of a narrative describing the potential benefits of the Info-Cognitive Proactive Decision Support (InfoCog) technology.
- Complete development of a notional technology roadmap that describes the required technology necessary for *InfoCog* to become viable.
- Complete development of a technology space characterization to identify the needs and requirements for decision support technology for PADS, and describe how PDS technologies cover subsets of that space, in preparation for defining workshop objectives.
- Continue literature survey to identify relevant research communities and researchers that are
 exploring decision making from the analytical/mathematical point of view, based on our refined
 understanding of research objectives and potential transition opportunities. We will use this
 information to refine our list of potential workshop participants and relevant topics for
 workshop sessions.
- Identify and secure dates and space for the workshop, to occur in the DC area in Mar/Apr 2015.

Meetings and Teleconferences

Table 1 reports meetings and teleconferences that Boston Fusion participated in during the reporting month in support of the PDS effort.

Table 1. Significant meetings and conferences during current reporting period

Date	Location	Participants	Purpose
28 Oct 2014	Boston Fusion, Burlington, MA	Kendra Moore (BFC), Connie Fournelle (BFC), Ron Moore (PS&E), Heather Oonk (PS&E), Mary King (PS&E)	Coordination and planning for the PADS workshop
29 Oct 2014	Boston Fusion, Burlington, MA	Jeff Morrison (ONR), Kendra Moore (BFC), Connie Fournelle (BFC), Ron Moore (PS&E), Heather Oonk (PS&E), Mary King (PS&E)	Coordination and planning for the PADS workshop

Anticipated Problems

No current problems.

Financial

Table 2. Project Financial Status

Current Expenditures	Cumulative Expenditures	Total Contract Value	_	Estimate to Complete
\$3,298	48,996	\$149,988	\$149,988	\$100,992

^{*}Note: Financials are as of 9/28/14. Financials for the month of October were not available by the due date of this report (10/31/14).

Schedule of Deliverables

Table 3. Project Deliverable Status

CDRL	CLIN	Deliverable	Due Date	Delivery Date
A001	0001	PI Meeting Slides	8/5/14	7/30/14
B001	0002	Progress Report #1 w/SF-298	8/31/14	9/2/14
B001	0003	Progress Report #2 w/SF-298	9/30/14	9/30/14
B001	0004	Progress Report #3 w/SF-298	10/31/14	10/31/14
B001	0005	Progress Report #4 w/SF-298	11/30/14	



CDRL	CLIN	Deliverable	Due Date	Delivery Date
C001	0006	Final Report and Briefing w/SF-298	12/31/14	